



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,089	11/13/2001	Chong-In Kim	P56575	6594

8439 7590 03/06/2006

ROBERT E. BUSHNELL

1522 K STREET NW

SUITE 300

WASHINGTON, DC 20005-1202

EXAMINER

ABRISHAMKAR, KAVEH

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,089

Applicant(s)

KIM ET AL.

Examiner

Kaveh Abrishamkar

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-16 and 18-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10, 12-16 and 18-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on December 16, 2005.
Claims 1,3,7,12,13,16 are currently amended and claims 11 and 17 are cancelled by virtue of the amendment.
2. Claims 1-10 and 12-16, and 18-20 are currently being considered.

Response to Arguments

3. Applicant's arguments filed December 16, 2005 have been fully considered but they are not persuasive for the following reasons:

Regarding currently amended claim 1, the applicant argues that the CPA, Davis (U.S. Patent No. 6,633,981) and Norton (U.S. Patent No. 6,616,054), does not teach "said removable storage unit to be utilized as an MP3 player when disconnected from said interface part." This argument is not found persuasive in light of the disclosure of Quarendon et al. (U.S. Patent Publication US 2002/0023028 A1). Quarendon is being used as support for the 103(a) rejection and not as prior art used in rejecting the pending claims. Applicant argues that a smart card as disclosed in the CPA, Davis and Norton, cannot be used as a MP3 player. Norton states a smart card that can "receive MP3 files and provide the user with up to several hours of music" (column 11 lines 35-40) and the smart can be "used to store MP3 music files and manipulate the files as

Art Unit: 2131

well" (column 11 lines 35-40). Applicant argues that smart card does not have the power capabilities to playback MP3 files. Quarendon states that a "portable playback device 46 may, for example, be an MP3, player, a smart card, or some other music player with a built in memory unit for recording thereon. or a music player with memory for downloading thereto" (paragraph 31). It is asserted that this disclosure clarifies that a smart card can indeed be utilized as an MP3 player. Therefore, the rejection using the CPA is maintained for the claims.

Furthermore, the applicant argues that the CPA, (Cromer et al. U.S. Patent Publication No. US 2002/0083323), does not teach "a digital camera including an image playback part for reproducing an image file." Cromer however states that a smart card is coupled to the digital camera (paragraphs 19-20) to provide information to be obtained by the camera. It is asserted by the examiner that since the smart card is coupled to the camera, and provides functionality to the camera it can be interpreted as part of the camera. Furthermore, the smart card is necessary for functioning of the camera as "the camera is disabled unless it detects, via the RF interface or smart card, an approved photographer" (paragraph 19). Therefore, it is interpreted that the smart card is an integral part of the camera and all integral parts of the camera can be interpreted as the digital camera.

Claim Rejections - 35 USC § 103

Art Unit: 2131

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, and 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis (U.S. Patent No. 6,633,981) in view of Norton (U.S. Patent No. 6,616,054).

Regarding claim 1, Davis discloses:

A computer comprising a main board provided with a BIOS-ROM booting a system and a CPU, further comprising:

“a removable storage unit having a casing, a readable and writable memory accommodated in the casing and having a data storing part and a code storing part, a plug provided at the casing and transmitting data in the memory therethrough” (column 3 line 63 – column 4 line 8), wherein a token is a portable (removable) integrated circuit device such as a smartcard;

“an interface part provided at the main board and to which the plug of the removable storage unit is removably connected” (column 3 line 63 – column 4 line 8), wherein the token (removable storage device) is capable of interfacing with a token reader; and

“a controller controlling the system to be operated where a user code received from the code storing part through the plug and interface part is equal to a unit code stored in the BIOS-ROM” (Abstract, column 3 line 63 – column 4 line 8,

Art Unit: 2131

column 4 lines 23-46), wherein if a token fails the authentication procedure, access to a BIOS portion is prohibited.

Davis does not explicitly disclose the removable storage unit comprises an MP3 playback part for reproducing an MP3 file stored in said data storing part to enable said removable storage device to be utilized as an MP3 player when disconnected from said interface part. Norton discloses a smart card which can "receive MP3 files and provide the user with up to several hours of music" (column 11 lines 35-40) and the smart card can be "used to store the MP3 music files and manipulate the files as well" (column 11 lines 35-40). Davis and Norton are analogous arts in that both are concerned with smart cards. The modification of Davis to incorporate Norton's capability of storing and manipulating MP3s would be beneficial for the transfer of MP3s from the computer to the user through one interface. Furthermore, it would add a functional use to the smart card (playing music) while it is not being used to authenticate a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the smart card of Davis to playback MP3s to simplify the transfer of songs, and to add a functional capability to the smart card outside of authenticating the user to the computer.

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Davis discloses:

The computer according to claim 1, wherein the controller is provided in the BIOS-ROM (column 4 lines 22-46), wherein a BIOS state machine authenticates a

Art Unit: 2131

token before allowing access to a second portion of the BIOS code.

Claim 3 is rejected as applied above in rejecting claim 1. Davis does not explicitly disclose that the casing is comprised of a plurality of play/control buttons thereon for controlling the MP3 playback part, a liquid display (LCD) screen on which a list of the MP3 files is displayed, and a sound output port. Norton discloses a smart card which can "receive MP3 files and provide the user with up to several hours of music" (column 11 lines 35-40) and the smart card can be "used to store the MP3 music files and manipulate the files as well" (column 11 lines 35-40). Davis and Norton are analogous arts in that both are concerned with smart cards. The modification of Davis to incorporate Norton's capability of storing and manipulating MP3s would be beneficial for the transfer of MP3s from the computer to the user through one interface. Furthermore, it would add a functional use to the smart card (playing music) while it is not being used to authenticate a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the smart card of Davis to playback MP3s to simplify the transfer of songs, and to add a functional capability to the smart card outside of authenticating the user to the computer. It was well-known in the art at the time of invention that MP3 players contain a plurality of play/control buttons thereon for controlling the MP3 playback part, a liquid display (LCD) screen on which a list of the MP3 files is displayed, and a sound output port, in order to select songs and to listen to the songs that are selected.

Claim 5 is rejected as applied above in rejecting claim 1. Furthermore, Davis discloses:

The computer according to claim 1, wherein the interface part is comprised of one of a USB port and an IEEE 1394 port for transmitting data to, or receiving data from, the main board (column 3 line 62 – column 4 line 10), wherein the token reader can be interfaced to the computer via a USB port.

Claim 6 is rejected as applied above in rejecting claim 1. Furthermore, Davis discloses:

The computer according to claim 1, wherein the memory is comprised of a flash memory (column 3 lines 63-column 4 line 10), wherein the memory is on the token.

Regarding claim 7, Davis discloses:

A method of driving a computer having a BIOS-ROM booting the computer, said method comprising steps of:

“turning on the computer” (column 4 line 66 – column 5 line 14), wherein the computer is turned on;

“starting a POST (power on self test) by means of the BIOS-ROM when the computer is turned on” (column 4 line 66 – column 5 line 14), wherein the examiner interprets the POST to automatically start when the computer is turned on and is necessary to detect the token reader which is disclosed;

“initializing a removable storage unit having a user code stored therein, said removable storage unit being connected to said computer via a port

Art Unit: 2131

connected to an interface part for transmitting data between the computer and the removable storage unit (column 3 line 63 – column 4 line 8), wherein a token is a portable (removable) integrated circuit device such as a smartcard and is capable of interfacing with a reader for the purposes of authentication ;

“comparing, upon initialization of the removable storage unit, the user code to a unit code stored in the computer when the removable storage unit is connected to said interface part” (Abstract, column 3 line 63 – column 4 line 8, column 4 lines 23-46), wherein if a token fails the authentication procedure, access to a BIOS portion is prohibited; and

“booting the computer when the user code is equal to the unit code” (Abstract, column 3 line 63 – column 4 line 8, column 4 lines 23-46), wherein if a token passes the authentication, access to the second portion of the BIOS code is allowed.

Davis does not explicitly disclose the removable storage unit comprises an MP3 playback part for reproducing an MP3 file stored in said data storing part to enable said removable storage device to be utilized as an MP3 player when disconnected from said interface part. Norton discloses a smart card which can “receive MP3 files and provide the user with up to several hours of music” (column 11 lines 35-40) and the smart card can be “used to store the MP3 music files and manipulate the files as well” (column 11 lines 35-40). Davis and Norton are analogous arts in that both are concerned with smart cards. The modification of Davis to incorporate Norton’s capability of storing and manipulating MP3s would be beneficial for the transfer of MP3s from the computer to

Art Unit: 2131

the user through one interface. Furthermore, it would add a functional use to the smart card (playing music) while it is not being used to authenticate a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the smart card of Davis to playback MP3s to simplify the transfer of songs, and to add a functional capability to the smart card outside of authenticating the user to the computer.

Claim 8 is rejected as applied above in rejecting claim 7. Furthermore, Davis discloses:

The method according to claim 7, wherein the initializing step comprises,

“determining whether the removable storage unit is connected to the interface part” (column 4 line 66 – column 5 line 14), wherein the examiner interprets the POST to automatically start when the computer is turned on and is necessary to detect the token reader which is disclosed, and

“outputting an error message where the removable storage unit is not connected to the interface part” (column 4 lines 30-46, column 4 line 66 – column 5 line 14).

Claim 9 is rejected as applied above in rejecting claim 7. Furthermore, Davis discloses:

The method according to claim 7, further comprising a step of outputting an error message when the user code is not equal to the unit code without booting the computer (column 4 lines 30-46).

Art Unit: 2131

Claim 10 is rejected as applied above in rejecting claim 7. Furthermore, Davis discloses:

The method according to claim 7, wherein the unit code is stored in the BIOS-ROM (column 4 lines 22-46), wherein a BIOS state machine authenticates a token before allowing access to a second portion of the BIOS code.

5. Claims 4, 13-16, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis (U.S. Patent No. 6,633,981) in view of Norton (U.S. Patent No. 6,616,054) in further in view of Cromer et al. (U.S. Patent Publication No. US 2002/0083323 A1).

Claim 4 is rejected as applied above in rejecting claim 1. Davis-Norton does not teach that the removable storage unit further comprises a digital camera, and the digital camera includes an image playback part reproducing an image file. Cromer discloses that a removable storage unit that is a digital camera. Cromer is an analogous art to Davis and Norton, as it deals with using smart cards for authentication. Cromer discloses a smart card is coupled with a digital camera as a means to "allow the photographer's information (name, company, contract) to be obtained by the camera and associated with subsequent digital images" (paragraph 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 2131

to use the smart card of Davis in a digital camera to provide the photographer's information to the camera and the images that are produced.

Regarding claim 13, Davis discloses:

A computer security system comprising:

"a removable storage unit having a casing, a readable and writable memory disposed within the casing and having a data storing part and a code storing part, and a plug provided at the casing, said plug being removably connected to an interface part of a computer for enabling a mainboard of said computer to bidirectionally communicate with said removable storage unit" (column 3 line 63 – column 4 line 8), wherein a token is a portable (removable) integrated circuit device such as a smartcard;

"a BIOS-ROM disposed on said main board, said BIOS-ROM having a boot program and a unit code stored therein" (Abstract, column 3 line 63 – column 4 line 8, column 4 lines 23-46), wherein if a token fails the authentication procedure, access to a BIOS portion is prohibited; and

"a controller for comparing a user code received from the code storing part through the plug and interface part to the unit code stored in the BIOS-ROM, said controller enabling said BIOS-ROM to boot said computer when said user code and said unit code match" (Abstract, column 3 line 63 – column 4 line 8, column 4 lines 23-46), wherein if a token fails the authentication procedure, access to a BIOS portion is prohibited.

Davis does not explicitly disclose the removable storage unit comprises an MP3 playback part for reproducing an MP3 file stored in said data storing part to enable said removable storage device to be utilized as an MP3 player when disconnected from said interface part. Norton discloses a smart card which can "receive MP3 files and provide the user with up to several hours of music" (column 11 lines 35-40) and the smart card can be "used to store the MP3 music files and manipulate the files as well" (column 11 lines 35-40). Davis and Norton are analogous arts in that both are concerned with smart cards. The modification of Davis to incorporate Norton's capability of storing and manipulating MP3s would be beneficial for the transfer of MP3s from the computer to the user through one interface. Furthermore, it would add a functional use to the smart card (playing music) while it is not being used to authenticate a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the smart card of Davis to playback MP3s to simplify the transfer of songs, and to add a functional capability to the smart card outside of authenticating the user to the computer.

Davis-Norton does not teach that the removable storage unit further comprises a digital camera, and the digital camera includes an image playback part reproducing an image file. Cromer discloses that a removable storage unit that is a digital camera. Cromer is an analogous art to Davis and Norton, as it deals with using smart cards for authentication. Cromer discloses a smart card is coupled with a digital camera as a means to "allow the photographer's information (name, company, contract) to be

Art Unit: 2131

obtained by the camera and associated with subsequent digital images” (paragraph 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the smart card of Davis in a digital camera to provide the photographer’s information to the camera and the images that are produced.

Claim 14 is rejected as applied above in rejecting claim 13. Furthermore, Davis discloses:

The computer according to claim 13, wherein the controller is provided in the BIOS-ROM (column 4 lines 22-46), wherein a BIOS state machine authenticates a token before allowing access to a second portion of the BIOS code.

Claim 15 is rejected as applied above in rejecting claim 13. Davis does not explicitly disclose that the casing is comprised of a plurality of play/control buttons thereon for controlling the MP3 playback part, a liquid display (LCD) screen on which a list of the MP3 files is displayed, and a sound output port. Norton discloses a smart card which can “receive MP3 files and provide the user with up to several hours of music” (column 11 lines 35-40) and the smart card can be “used to store the MP3 music files and manipulate the files as well” (column 11 lines 35-40). Davis and Norton are analogous arts in that both are concerned with smart cards. The modification of Davis to incorporate Norton’s capability of storing and manipulating MP3s would be beneficial for the transfer of MP3s from the computer to the user through one interface. Furthermore, it would add a functional use to the smart card (playing music) while it is not being used

Art Unit: 2131

to authenticate a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the smart card of Davis to playback MP3s to simplify the transfer of songs, and to add a functional capability to the smart card outside of authenticating the user to the computer. It was well-known in the art at the time of invention that MP3 players contain a plurality of play/control buttons thereon for controlling the MP3 playback part, a liquid display (LCD) screen on which a list of the MP3 files is displayed, and a sound output port, in order to select songs and to listen to the songs that are selected.

Claim 16 is rejected as applied above in rejecting claim 13. Davis does not explicitly disclose the removable storage unit comprises an MP3 playback part for reproducing an MP3 file stored in said data storing part to enable said removable storage device to be utilized as an MP3 player when disconnected from said interface part. Norton discloses a smart card which can "receive MP3 files and provide the user with up to several hours of music" (column 11 lines 35-40) and the smart card can be "used to store the MP3 music files and manipulate the files as well" (column 11 lines 35-40). Davis and Norton are analogous arts in that both are concerned with smart cards. The modification of Davis to incorporate Norton's capability of storing and manipulating MP3s would be beneficial for the transfer of MP3s from the computer to the user through one interface. Furthermore, it would add a functional use to the smart card (playing music) while it is not being used to authenticate a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 2131

to modify the smart card of Davis to playback MP3s to simplify the transfer of songs, and to add a functional capability to the smart card outside of authenticating the user to the computer.

Davis-Norton does not teach that the removable storage unit further comprises a digital camera, and the digital camera includes an image playback part reproducing an image file. Cromer discloses that a removable storage unit that is a digital camera. Cromer is an analogous art to Davis and Norton, as it deals with using smart cards for authentication. Cromer discloses a smart card is coupled with a digital camera as a means to "allow the photographer's information (name, company, contract) to be obtained by the camera and associated with subsequent digital images" (paragraph 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the smart card of Davis in a digital camera to provide the photographer's information to the camera and the images that are produced.

Claim 18 is rejected as applied above in rejecting claim 13. Furthermore, Davis discloses:

The computer according to claim 13, wherein the interface part is comprised of a USB port for transmitting data to, or receiving data from, the main board (column 3 line 62 – column 4 line 10), wherein the token reader can be interfaced to the computer via a USB port.

Art Unit: 2131

Claim 19 is rejected as applied above in rejecting claim 13. Furthermore, Davis discloses:

The computer according to claim 13, wherein the interface part is comprised of an IEEE 1394 port for transmitting data to, or receiving data from, the main board (column 3 line 62 – column 4 line 10), wherein the token reader can be interfaced to the computer via a USB port.

Claim 20 is rejected as applied above in rejecting claim 13. Furthermore, Davis discloses:

The computer according to claim 13, wherein the memory is comprised of a flash memory (column 3 lines 63-column 4 line 10), wherein the memory is on the token.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 2131

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KA
03/03/2006

CHRISTOPHER REVAK
PRIMARY EXAMINER



3/4/06